

ADR in the Construction Industry: Continuing the Development of a More Efficient Dispute Resolution Mechanism

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"An old saying goes: 'If all you have is a hammer, every problem starts to look like a nail.'"¹

I. INTRODUCTION

The construction industry is one that is prone to disputes; various parties, deadlines, coordination, financing concerns, profit motives and poor communication may be involved in any project.² During the 1980s, absolute litigiousness characterized disputes in the industry and it "paid not to pay—to defer the resolution of disputes rather than pursue settlement."³ Many contractors and owners in the industry immediately resorted to time-

¹ *Turning the Tide on Disputes Has Really Started to Pay Off*, ENR, July 11, 1994, at 58, 58.

² One study has identified the ten principal specific causes of construction disputes:

- (1) Contract provisions which unrealistically shift project risks to parties who are unprepared to cover those risks.
- (2) Unrealistic expectations of the parties, particularly owners who have insufficient financing to accomplish their objectives.
- (3) Ambiguous contract documents.
- (4) Contractors who bid too low.
- (5) Poor communications between project participants.
- (6) Inadequate contractor management, supervision and coordination.
- (7) Failure of participants to deal promptly with changes and unexpected conditions.
- (8) A lack of team spirit or collegiality among participants.
- (9) A "macho" or litigious mind-set on the part of some or all project participants.
- (10) Contract administrators who prefer to buck a dispute to a higher level or to lawyers rather than take responsibility for resolving the problem at the source.

Preventing and Resolving Construction Disputes, 9 ALTERNATIVES TO HIGH COST LITIG. 182, 185 (1991) (citing a survey of attendants at the 1991 Construction Industry Institute annual conference).

³ Robert A. Rubin & Bellina Carbajal-Quintas, *Alternative Dispute Resolution*, in DRAFTING CONSTRUCTION CONTRACTS AND HANDLING CONSTRUCTION LITIGATION 1993: PREPARING FOR THE "NEW" PUBLIC AND PRIVATE WORKS 439, 439 (1993).

consuming and expensive litigation procedures to resolve disputes. As one expert commented, "the 1980s ultimately may be remembered as the time when the industry turned on itself"⁴

In the 1960s and 1970s, when the industry became frustrated with litigating construction disputes, there was a movement toward arbitration;⁵ the hyper construction industry of the 1980s bucked this trend as construction litigation soared. As the cost of litigation increased and incentives to litigate decreased,⁶ however, the construction industry once again assumed its place at the vanguard in its use of alternative dispute resolution (ADR) by renewed efforts to arbitrate disputes. The judiciary has also encouraged the use of ADR in construction disputes. In fact, "[t]rial judges loathe construction lawsuits [T]hus the judiciary spares no effort to divert such cases to any available form of alternative dispute resolution."⁷

The search by the industry for "structures aimed chiefly at settling controversy and improving relationships" as opposed to "mechanisms to try cases" has been called a "paradigm shift" by one expert.⁸ As the use of arbitration and other forms of ADR increased, it became apparent that new means of ADR were also available to resolve disputes. Now, the American Arbitration Association (AAA) is in the midst of dealing with criticisms leveled against the use of arbitration in the construction industry, and the AAA has now developed recommendations to change and update the organization's Construction Industry Arbitration Rules.⁹

The construction industry needs a way to resolve disputes in a quick and efficient way because of the nature of the industry; in some disputes, construction on a project may be delayed for months or even years while a case works its way through the courts.¹⁰ Contractors and owners may go

⁴ Rob McManamy, *Industry Pounds Away at Disputes*, ENR, July 11, 1994, at 24, 24.

⁵ See Richard H. Steen & Robert J. MacPherson, *The Construction Industry: Forging a Path for ADR*, NEW JERSEY LAW., Aug.-Sept. 1993, at 19.

⁶ See *id.* See also Mary Jane Augustine, *Dispute Prevention and Resolution in the Construction Industry*, N.Y.L.J., Dec. 1, 1994, at 3.

⁷ Charles M. Sink, *Special Masters: ADR's Last Clear Chance Before Trial*, in ADR: A PRACTICAL GUIDE TO RESOLVE CONSTRUCTION DISPUTES 253, 253 (Alan E. Harris et al. eds., 1994).

⁸ Thomas J. Stipanowich, *Dispute Avoidance and Resolution: The Construction Industry as the Cutting Edge of Evolution*, CONSTRUCTION LAW., Nov. 1995, at 3, 4.

⁹ AMERICAN ARBITRATION ASSOCIATION CONSTRUCTION INDUSTRY ARBITRATION RULES (1991), reprinted in ALTERNATIVE DISPUTE RESOLUTION IN THE CONSTRUCTION INDUSTRY app. A (Robert F. Cushman et al. eds., 1991) [hereinafter AAA CONSTRUCTION RULES].

¹⁰ See *infra* notes 45-47, 56-59 and accompanying text.

bankrupt in the meantime. For years, many of these disputes, notwithstanding skepticism and reticence on the part of some in the legal profession, have been automatically submitted to binding arbitration for resolution in accordance with terms of standard contracts.¹¹

In recent years especially, however, the industry has been witness to an ever-increasing emphasis on quick and inexpensive dispute prevention and resolution mechanisms. One industry journal has even claimed that the construction industry is in the middle of a "quiet revolution" to find innovative solutions for solving disputes among the various parties.¹² There is thus "a growing recognition in the industry that the basic structure of legal relationships and the manner of doing business with one another must be changed to prevent non-productive and costly lawsuits."¹³

II. THE CONSTRUCTION CONTRACT AND ADR

ADR, both in the construction industry and generally, is contractual; it depends upon the existence of an agreement between the parties.¹⁴ Courts and traditional litigation, on the other hand, are available to all without prearrangement. For this reason, ADR is particularly suited to the construction industry, where it is usually anticipated that, given a project's complexity, some sort of dispute may arise.¹⁵

A contract, in one form or another, lies at the heart of virtually every transaction in the construction industry.¹⁶ The rules of contract interpretation therefore play a crucial role in defining the duties and obligations of the numerous parties. The parties to a contract must define

¹¹ See AMERICAN INSTITUTE OF ARCHITECTS (AIA), AIA DOCUMENT A201, GENERAL CONDITIONS OF THE CONTRACT FOR CONSTRUCTION § 4.5 (1987); AIA, AIA DOCUMENT A401, STANDARD FORM OF AGREEMENT BETWEEN CONTRACTOR AND SUBCONTRACTOR, ART. 6 (1987); AIA, AIA DOCUMENT B141, STANDARD FORM OF AGREEMENT BETWEEN OWNER AND ARCHITECT, ART. 7 (1987).

¹² See *Quiet Revolution Brews for Settling Disputes*, ENR, Aug. 26, 1991, at 21, 21.

¹³ Richard H. Steen & Robert J. MacPherson, *The Construction Industry: Forging a Path for ADR*, NEW JERSEY LAW., Aug.-Sept. 1993, at 19, 19.

¹⁴ Anthony E. Battelle, *The Growing Impact of ADR on the Construction Industry: "Real Time" Dispute Processing on the Boston Central Artery/Tunnel Project*, THE CONSTRUCTION LAW., Nov. 1995, at 13, 14.

¹⁵ See *id.*

¹⁶ See Overton A. Currie & Ronald G. Robey, *Winning Strategies in Construction Negotiations, Arbitration, and Litigation*, in CONSTRUCTION CONTRACTS AND LITIGATION 911, 923 (1988).

the scope and terms of the agreement.¹⁷ The actual contract documents can include any number of documents depending on what the parties want to include. There is usually language in construction contracts that refers to binding arbitration in the event that disputes erupting from contract duties. Prime contractors usually include a "flow down" clause which ties all subcontractors to the main agreement, including any arbitration clause.¹⁸ Today, contract clauses providing for arbitration of disputes are commonplace. For example, the widely used American Institute of Architects (AIA) Standard Form Contract¹⁹ provides for arbitration in accordance with the Construction Rules.²⁰ The AAA also has a standard arbitration clause which it promulgates.²¹ It is also general practice to include in international construction contracts a provision requiring arbitration under the rules of the International Chamber of Commerce.²²

Generally, no particular form or special words are necessary to establish an agreement to arbitrate a dispute between the parties.²³ However, there must be a clear indication from the contract language that

¹⁷ See *id.*

¹⁸ See *id.*

¹⁹ AIA, AIA DOCUMENT A201 (1987) provides: "Controversies and Claims Subject to Arbitration. Any controversy or Claim arising out of or related to this Contract, or the breach thereof, shall be settled by arbitration in accordance with the Construction Industry Arbitration Rules of the American Arbitration Association" *Id.*

²⁰ See AAA CONSTRUCTION RULES. See also JAMES ACRET, CONSTRUCTION ARBITRATION HANDBOOK 5 (1985). "[T]he modern arbitration statute is amplified by the AAA rules. The AAA rules provide a simplified, common sense structure for arbitration proceedings." *Id.*

²¹ The AAA standard arbitration clause for the construction industry provides:

Any controversy or claim arising out of or relating to this contract, or the breach thereof, shall be settled by arbitration in accordance with the Construction Industry Arbitration Rules of the American Arbitration Association, and judgment upon the award rendered by the arbitrator(s) may be entered in any court having jurisdiction thereof.

AAA CONSTRUCTION RULES at 5.

²² The standard International Chamber of Commerce arbitration clause reads: "All disputes arising in connection with the present contract shall be finally settled under the Rules of Conciliation and Arbitration of the International Chamber of Commerce . . ."

INTERNATIONAL CHAMBER OF COMMERCE, THE ICC INTERNATIONAL COURT OF ARBITRATION 3 (1987). See also Currie & Robey, *supra* note 16, at 940-941.

²³ See Currie & Robey, *supra* note 16, at 950.

the parties intended the disputed issue to be subject to arbitration.²⁴ Standard arbitration clauses recommended by the AIA and the AAA expressly state that all disputes arising from the contract will be arbitrated.²⁵

As for the enforceability of construction arbitration agreements, there is generally little question as to whether construction arbitration is legally permissible as long as the parties have agreed to arbitrate.²⁶ The Federal Arbitration Act²⁷ and arbitration statutes in most states provide for arbitrating commercial disputes.²⁸

III. ARBITRATING CONSTRUCTION DISPUTES

As one court has put it, arbitration is a "substitution, by consent of the parties, of another tribunal for the tribunal provided by the ordinary processes of law, and its object is the final disposition, in a speedy, inexpensive, expeditious and perhaps less formal manner, of the controversial differences between the parties."²⁹ Arbitration has been used for many years in resolving construction disputes; for a long time it was the only alternative to litigation.³⁰ The conduct of an arbitration hearing may be

²⁴ See *Joseph F. Trionfo, Inc. v. Earnest B. La Rosa & Sons, Inc.*, 381 A.2d 727 (Md. 1978) (holding that a provision in a standard form contract for referral to the architect of disputes relating to the work did not operate as an arbitration clause).

²⁵ See, e.g., AIA, AIA DOCUMENT A201 (1987).

²⁶ See H. James Wulfsberg & Matthew D. Lempres, *Advantages of Arbitrating Construction Disputes*, in *ALTERNATIVE DISPUTE RESOLUTION IN THE CONSTRUCTION INDUSTRY* 1, 5 (Robert F. Cushman et al. eds., 1991). See also JAMES ACRET, *CONSTRUCTION ARBITRATION HANDBOOK* §§ 3.01-3.17 (1985).

²⁷ 9 U.S.C. §§ 1-307 (1994). Section 2 of the Federal Arbitration Act provides, "A written provision in any maritime transaction or a contract evidencing a transaction involving commerce to settle by arbitration a controversy thereafter arising out of such contract or transaction . . . shall be valid, irrevocable, and enforceable . . ." *Id.* § 2. For decisions which have been held to involve interstate commerce under the Federal Arbitration Act, see *R.J. Palmer Constr. Co. v. Wichita Bank Instrument Co.*, 642 P.2d 127 (Kan. Ct. App. 1982) (pertaining to a dispute between owner and architect); *Brockett Pointe Shopping Ctr., Ltd. v. Development Contractors, Inc.*, 389 S.E.2d 374 (Ga. Ct. App. 1989) (involving out-of-state goods supplied during execution of construction contract).

²⁸ See Wulfsberg & Lempres, *supra* note 26, at 5. For a complete list of state arbitration statutes, see *ALTERNATIVE DISPUTE RESOLUTION IN THE CONSTRUCTION INDUSTRY* app. I (Robert F. Cushman et al. eds., 1991).

²⁹ *Barcon Assoc. v. Tri-County Asphalt Corp.*, 430 A.2d 214, 217 (N.J. 1981) (quoting *Eastern Eng'g Co. v. Ocean City*, 11 N.J. Misc. 508, 510-511 (Sup. Ct. 1973)).

³⁰ *Stipanowich*, *supra* note 8, at 3.

tailored to meet the parties' expectations, but construction arbitrations generally have some common characteristics.

Some procedures in an arbitration hearing are similar to procedures in a court of law. Parties usually present their cases through the presentation of evidence and testimony, then parties may be given a chance to rebut the arguments of opponents.³¹ Unlike court proceedings, however, which are open to the public, usually only parties with a direct interest in the arbitration are entitled to attend arbitration hearings.³² Other persons may be able to attend a hearing at the discretion of the arbitrator. Also, the vast majority of participants need or want to retain counsel; this is especially true in construction arbitrations, which may be lengthy and complex.³³ This complexity often requires extensive documentation and the use of counsel experienced in the examination of witnesses.

Because the strict legal rules of evidence do not apply to arbitration proceedings,³⁴ arbitrators have wide latitude in accepting all kinds of evidence. But just because evidence is submitted, it does not necessarily follow that the arbitrator needs to consider it.³⁵ Generally, arbitrators, who partly rely on their own expertise in the construction industry, may assign any weight they feel is justified to a piece of evidence.³⁶

Experts provide important explanations of technical information in construction disputes; expert testimony is thus necessary in both construction litigation and arbitration. However, because arbitrators often have some knowledge and experience in the construction industry, the need for some of the expert testimony in construction arbitrations may be obviated somewhat by the arbitrator's own knowledge and expertise.³⁷ Although arbitrations are not court proceedings and arbitrators are not bound by precedent, arbitrators are often concerned with legal precedent and may ask the participants to submit legal memoranda or briefs on points of law.

³¹ See Currie & Robey, *supra* note 16, at 944.

³² See *infra* notes 48-49 and accompanying text.

³³ Currie & Robey, *supra* note 16, at 957.

³⁴ See Lisa Bernstein, *Understanding the Limits of Court-Annexed ADR: A Critique of Federal Court-Annexed Arbitration Programs*, 141 U. PA. L. REV. 2169, 2181 (1993). See, e.g., M.D.N.C. LOC. ARB. R. 606(g) ("The arbitrator shall weigh all evidence presented upon assessment of its relevance and trustworthiness. The Federal Rules of Evidence shall not apply, except for rules concerning privilege or protection.").

³⁵ See Currie & Robey, *supra* note 16, at 958.

³⁶ See *id.*

³⁷ See *id.* at 959.

After the hearing, the arbitrator issues an award which is binding on both parties to the construction dispute.³⁸ To prevent a reviewing court from vacating an award, the award must be based on the merits of the controversy; it must be final, and it must dispose of all issues raised by either party.³⁹ Thus, arbitrators usually include in the language of the award that the award is the full and final settlement of all claims by one party against the other.⁴⁰

Arbitration of disputes offers significant advantages when used in appropriate circumstances, but it may not be the best method in every case. It may be better, for example, in resolving technical and factual issues as opposed to complicated questions of law.⁴¹ Generally, the factors discussed below are thought to be advantages of arbitration in the context of construction disputes.⁴²

One advantage of arbitration is the expertise of the arbitrator. Construction disputes may often demand a high level of experience and knowledge on the part of decisionmakers. In addition, if the parties do not specify an arbitrator, the Construction Rules provide a method to do so.⁴³

Speed and prompt resolution may be another advantage to arbitration. In theory at least, arbitration resolves construction disputes faster than

³⁸ See *id.* at 960.

³⁹ See *id.* (citing *Industrial Elec. Co. v. Meyers*, 85 N.E.2d 415 (Ohio App. 1949)).

⁴⁰ See *id.*

⁴¹ See Wulfsberg & Lempres, *supra* note 26, at 3.

⁴² Many authors and commentators have formulated similar generally accepted advantages. See Wulfsberg & Lempres, *supra* note 26; James R. Madison, *Suitability of Alternative Dispute Resolution Processes for Resolving Construction Disputes*, in *ADR: A PRACTICAL GUIDE TO RESOLVE CONSTRUCTION DISPUTES* 11 (Alan E. Harris et al. eds., 1994).

⁴³ AAA CONSTRUCTION RULES § 13. The rule provides in pertinent part:

If the parties have not appointed an arbitrator and have not provided any other method of appointment, the arbitrator shall be appointed in the following manner: immediately after the filing of the demand or submission, the AAA shall submit simultaneously to each party to the dispute an identical list of names of persons chosen from the panel. . . . From among the persons who have been approved on both lists, and in accordance with the designated order of mutual preference, the AAA shall invite the acceptance of an arbitrator to serve.

Id.

traditional litigation.⁴⁴ Usually, time consuming prehearing motions and discovery practice are avoided.⁴⁵ Prompt resolution is in theory one of the greatest advantages of arbitration because it allows parties who wish to proceed on the project or start new projects the opportunity to do so.⁴⁶

Another important advantage in theory is cost savings. Cost savings are usually obtained through reduction in attorneys' fees because of the absence of frequent prehearing motions and discovery and the absence of appellate procedures. Although there are arbitration-specific costs⁴⁷ that may be substantial, these costs generally do not equal or exceed the costs of litigation.⁴⁸

Privacy concerns may also be a positive factor in choosing arbitration. Arbitration proceedings are not subject to the openness and accessibility requirements of court proceedings. In fact, arbitrations are required to remain confidential unless a law provides otherwise.⁴⁹ Confidentiality is of particular benefit to architects and contractors whose professional reputations may suffer as a result of litigation.⁵⁰

The opportunity to present a case in an informal forum is also an appealing factor to disputants. The hearing may be conducted with much greater informality and less structure than litigation. In many cases this

⁴⁴ See Peter M. Mundheim, *The Desirability of Punitive Damages in Securities Arbitration: Challenges Facing the Industry Regulators in the Wake of Mastrobuono*, 144 U. PA. L. REV. 197, 202 (1995).

⁴⁵ For a full discussion of the discovery process in litigation and arbitration of the construction industry, see MICHAEL T. CALLAHAN ET AL., *DISCOVERY IN CONSTRUCTION LITIGATION* (2d ed. 1987).

⁴⁶ See Wulfsberg & Lempres, *supra* note 26, at 19.

⁴⁷ See Currie & Robey, *supra* note 16, at 932.

⁴⁸ But cf. *infra* notes 65-67 and accompanying text; Thomas H. Asselin, *Using Mediation to Resolve Construction Disputes*, in *ALTERNATIVE DISPUTE RESOLUTION IN THE CONSTRUCTION INDUSTRY I*, 1 (Robert F. Cushman et al. eds., 1991 & James P. Groton, ed., Supp. 1993).

⁴⁹ See AAA CONSTRUCTION RULES § 25. Section 25 of the Construction Rules provides:

The arbitrator shall maintain the privacy of the hearings unless the law provides to the contrary. Any person having a direct interest in the arbitration is entitled to attend hearings. The arbitrator shall otherwise have the power to require the exclusion of any witness, other than a party . . . during the testimony of any other witness. It shall be discretionary with the arbitrator to determine the propriety of the attendance of any other person.

Id.

⁵⁰ See Wulfsberg & Lempres, *supra* note 26, at 22.

permits the dispute to be resolved more promptly and less expensively. It may also engender greater support for the process and credibility of the award, partly because of the less adversarial nature.⁵¹

Finally, the avoidance of punitive damages is a factor that should be considered by the parties. In some states, punitive damages are not available to a party in arbitration.⁵² Because arbitration proceedings are based on contractual rights, there is state law authority that concludes that only compensatory damages are permitted.⁵³ This is an obvious advantage for potential defendants. Some states, however, do allow punitive damage awards as part of full and necessary relief.⁵⁴

Thus, arbitration may provide significant advantages over traditional litigation, and after a review of the advantages of arbitration, a contractor or owner may conclude that arbitration is the only way to go. Although these advantages are attractive, they have not been fully realized in the construction industry. In addition, there are also disadvantages to the arbitration process that a party should consider.

One important disadvantage may be the possibility of protracted hearings. "Expert, respected arbitrators are usually busy people [and] [t]heir schedules have to mesh" with those involved in the dispute.⁵⁵ In arbitration, therefore, resolution may be prolonged. However, once a trial begins in court, it proceeds without interruption, although it may take a long time to begin the trial.⁵⁶ The longest arbitration in California history concluded in late 1995 after nearly five years.⁵⁷ Protracted hearings are of particular

⁵¹ See *id.* at 15.

⁵² See *id.* See also Jordan L. Resnick, Note, *Beyond Mastrobuccone: A Practitioner's Guide to Arbitration, Employment Disputes, Punitive Damages, and the Implications of the Civil Rights Act of 1991*, 23 HOFSTRA L. REV. 913, 928-929 (1995).

⁵³ See *Garrity v. Lyle Stuart, Inc.*, 353 N.E.2d 793, 794 (1976) (holding that punitive damages are based on public policy which must be reserved to the state); *School City v. East Chicago Fed'n of Teachers, Local 511*, 422 N.E.2d 656, 663 (Ind. Ct. App. 1981) (holding that ambiguous arbitration clauses will be interpreted against the use of punitive damages).

⁵⁴ See, e.g., *Willoughby Roofing & Supply Co. v. Kajima Int'l, Inc.*, 598 F. Supp. 353 (N.D. Ala. 1984), *aff'd*, 776 F.2d 269 (11th Cir. 1985). For a full discussion on punitive damage awards in arbitration, see Glower W. Jones, *Awarding Punitive Damages by Arbitration*, CONSTRUCTION LAW., Aug. 1987, at 1, 1.

⁵⁵ ROBERT A. RUBIN ET AL., CONSTRUCTION CLAIMS: ANALYSIS, PRESENTATION, DEFENSE 183 (1983).

⁵⁶ See *id.*

⁵⁷ See Catherine Reagor, *Gosnell Fined \$47 Million in Calif. Case; Work on Beach Hotel Found to be Shoddy*, PHOENIX GAZETTE, Oct. 10, 1995, at A1. The \$47 million award in this case was also believed to be the largest in California history. *Id.*

concern in the construction industry because a large project may just sit and gather dust and debt while parties pour money into legal proceedings. It may not even be wise or practical to compare the "time saved" in arbitration over litigation because cases that are litigated are often settled before the end of a trial.⁵⁸

Another consideration that may dissuade participants from using arbitration is uncertainty and the lack of a legal safeguard. A court ruling may be appealed although an arbitration award usually cannot be appealed.⁵⁹ This may prove to be a particular disadvantage to parties who may want to try to expand a point of law or are likely to win at the appellate level. In addition, arbitrators are not technically bound to follow the law, and even though awards may be overturned because of flagrant disregard of the law, awards are usually upheld.⁶⁰

Inconsistent results may also be a possibility in an arbitration hearing. If there are multiple parties to a dispute and the dispute is not consolidated, different arbitrators may reach inconsistent results and differing liabilities.⁶¹

The widespread view that arbitration is an expeditious method of resolving disputes is thus not always correct. A reluctant party can often delay the entire arbitration process by forcing the other party to apply to a court to either compel arbitration or enforce the award granted by the arbitrator. Even when both parties consent, the arbitration procedure is not always a simple, expeditious and inexpensive method of adjudicating commercial controversies. Years after construction of the Eurotunnel, parties are still involved in ongoing arbitrations.⁶² In another case, involving an action to confirm an arbitration award, the court noted that the total time consumed by the arbitration was nineteen months—too long for needed resources to be tied up in legal maneuvering.⁶³

In addition to long delays that may sometimes be associated with arbitration, the expenses may be prohibitive. Some of the direct costs of arbitration include attorney and expert witness fees, costs of preparing evidence and fees to court reporters and arbitrators.⁶⁴ Hearings which

⁵⁸ See Mundheim, *supra* note 44, at 202 n.27.

⁵⁹ See RUBIN ET AL., *supra* note 55, at 183.

⁶⁰ Cf. RUBIN ET AL., *supra* note 55.

⁶¹ See Currie & Robey, *supra* note 16, at 955.

⁶² See *Eurotunnel 1994 Results* (pt. 4), AFX NEWS, Apr. 10, 1995, at 1.

⁶³ See Currie & Robey, *supra* note 16, at 932.

⁶⁴ As of 1992, the cost for filing claims with the AAA was as follows:

Up to \$25,000	\$300
\$25,000 to \$50,000	\$500
\$50,001 to \$250,000	\$1,000

involve travel also incur significant expenses.⁶⁵ Moreover, concerns have also been expressed about the extent of post-arbitration litigation to confirm or vacate arbitration awards.⁶⁶ Although arbitration awards are usually upheld, a post-arbitration court proceeding results in additional time, money and uncertainty. Thus, compared to an ideal quick and cost-effective dispute resolution or avoidance program, significant disadvantages are present in the current system of arbitration in the construction industry. However, as one commentator has noted, "If practice and theory could be made to conform, arbitration would indeed be far more desirable"⁶⁷

IV. EXPLORING OTHER FORMS OF DISPUTE RESOLUTION AVAILABLE IN THE CONSTRUCTION INDUSTRY

There are other ADR methods which, in the past few years, have been introduced into and have established themselves in the construction industry. Some of these methods have been proven to be adept at solving the dispute in a timely and cost-effective manner and at the same time maintaining client relationships without much of the acrimony involved in litigation and binding arbitration procedures. Surveys have indicated that industry participants are satisfied with these new ADR procedures, and now the AAA has responded to this trend with proposals that it thinks will make the arbitration of construction disputes more desirable.

A. Other ADR Options Available in the Construction Industry

One of the other methods available for construction dispute resolution is mediation. The goal of mediation is "to assist the parties to reach a

\$250,001 to \$500,000	\$2,000
\$500,001 to \$5,000,000	\$3,000
More than \$5,000,000	\$4,000

After complaints about its previous complicated and expensive filing fee structure, the AAA adopted this revised and simplified fee structure in 1992. See George H. Friedman, *Changes in Fee Structure*, N.Y.L.J., May 7, 1992, at 3, 3. These costs do not include the sometimes substantial hourly-rate costs of paying the arbitrators themselves. See *Administrative Fee Schedule in AAA CONSTRUCTION RULES 22-23*.

⁶⁵ See Currie & Robey, *supra* note 16, at 932.

⁶⁶ See *id.* at 933.

⁶⁷ Max E. Greenberg, *Disadvantages of Arbitrating Construction Disputes*, in *ALTERNATIVE DISPUTE RESOLUTION IN THE CONSTRUCTION INDUSTRY* 29, 32 (Robert F. Cushman et al. eds., 1991).

mutually acceptable resolution of the dispute."⁶⁸ The mediation process may be summarized as follows: (1) the parties meet jointly with the mediator to exchange facts and briefly summarize their positions; if desired, witnesses may appear at this time; (2) the mediator caucuses privately with each party, and proceeds to shuttle back and forth between the parties, presenting offers and counteroffers as authorized; and (3) if a settlement is reached, the parties are brought together to confirm its terms and sign an agreement.⁶⁹ In addition to its rules for construction arbitration proceedings, the AAA has promulgated rules for construction mediation proceedings.⁷⁰ As with the arbitration rules, the mediation rules may be incorporated into the construction contract.⁷¹

Another option available for construction dispute resolution is partnering. Partnering has become popular in the industry and is touted as the means for both building cooperation at the jobsite and for preventing disputes. Partnering is a process whereby relationships are developed at an early stage in the project so that every party will work as a team to reduce friction on the job. "In other words, partnering is a synergy—a cooperative, collaborative management effort among contracting parties to complete a project in the most efficient, cost-effective way possible."⁷² Seminars and

⁶⁸ Asselin, *supra* note 48, at 3.

⁶⁹ See Rubin & Carbajal-Quintas, *supra* note 3, at 449.

⁷⁰ See AMERICAN ARBITRATION ASSOCIATION CONSTRUCTION INDUSTRY MEDIATION RULES, reprinted in ALTERNATIVE DISPUTE RESOLUTION IN THE CONSTRUCTION INDUSTRY app. B (Robert F. Cushman et al. eds., 1991) (1987).

⁷¹ *Id.* at 5. Parties may agree to the Mediation Rules through the following submission agreement: "The parties hereby submit the following dispute to mediation under the Construction Industry Mediation Rules of the [AAA]. The requirement of filing a notice of claim with respect to the dispute submitted to mediation shall be suspended until the conclusion of the mediation process." *Id.*

⁷² Carolyn M. Penna, *Partnering: Avoiding Disputes in the Construction Industry*, N.Y.L.J., Sept. 2, 1993, at 3, 3. The author comments:

The benefits of the partnering process are identifiable and numerous . . . [and include] reduced exposure to litigation through open communication and issue resolution strategies . . . lower risk of cost overruns and delays because of better time and cost control over the project . . . better product because energies are focused on ultimate goal and not misdirected to adversarial concerns . . . potential to expedite project through efficient implementation of contract . . . open communication calls for more efficient problem-solving . . . lower administrative costs . . . increased opportunity for innovation . . . increased opportunity for financial success and improved cash flow . . . and enhanced role in decision-making process . . .

brainstorming sessions may be held in which parties identify potential problem areas and resolve to work out differences without resorting to formal procedures.⁷³ The Army Corps of Engineers first developed the process in order to achieve timely, quality and dispute-free construction of large public projects.⁷⁴ This process is not an ADR procedure per se, but it does set a framework for avoiding disputes on the job,⁷⁵ and is therefore generally included in discussions of ADR in the context of the construction industry. Partnering also raises an issue for the legal profession. If partnering comes into widespread use, the issue is whether the need for lawyers in the construction industry will cease or significantly lessen. One commentator has said that the use of partnering means that "the role of lawyers in construction should change and be used more for prevention and less for repair."⁷⁶

A dispute review board (DRB) may be another option to consider in resolving a construction dispute quickly and effectively. A DRB presides through the duration of the project. This procedure sets up a forum for the exchange of grievances and informed independent evaluations of the merits of disputes. Usually, the board is selected at the beginning of the project and monitors progress throughout the life of the project in order to become familiar with any problems that may arise at critical stages.⁷⁷ The DRB may hear disputes formally or informally, thus providing numerous advantages

Id. (citing ASSOCIATED GENERAL CONTRACTORS OF AMERICA, *PARTNERING: A CONCEPT FOR SUCCESS* 2 n.5 (1991)).

⁷³ In partnering,

Questions such as the following are raised and discussed:

- What things do the other groups do that create problems for us?
- What do we do that may create problems for others?
- What is the responsibility of each team member in resolving issues?
- Who should intervene in a dispute and when?
- What obstacles can be anticipated in implementing the project?

H. Warren Knight et al., *ADR in Construction Disputes*, in *CALIFORNIA PRACTICE GUIDE*, ch. 3:715 (1994).

⁷⁴ See *id.*

⁷⁵ See Rubin & Carbajal-Quintas, *supra* note 3, at 442.

⁷⁶ *Dispute Prevention Through Partnering*, in *ALTERNATIVE DISPUTE RESOLUTION IN THE CONSTRUCTION INDUSTRY* 26, 40 (Robert F. Cushman et al. eds., 1991 & James P. Groton ed., Supp. 1993).

⁷⁷ See Knight et al., *supra* note 73, at 3:717.

to its use.⁷⁸ In the construction context, DRBs really do accomplish what arbitration is claimed to achieve: the quick and efficient resolution of disputes so that construction and progress on the project are not interrupted.⁷⁹ The cost of DRB proceedings, estimated to be between .04% to .51% of the total cost of a project,⁸⁰ pales in comparison to what parties may spend in protracted litigation or arbitration proceedings. The decisions of the board are nonbinding, but use of the method has shown that DRBs' decisions are usually accepted by the parties without attempt to appeal or rehear the issue.⁸¹ The DRB concept thus forces the parties to identify and deal with their problems as they occur.⁸² The DRB may also be quite useful in avoiding much of the acrimony involved in litigation or arbitration; alleviating the anger of the parties may allow for cooperation on future projects rather than resulting in a severance of business ties.

Med-arb and med-then-arb are two additional procedures which may be considered in lieu of construction arbitration. As the name suggests, med-

⁷⁸ See Rubin & Carbajal-Quintas, *supra* note 3, at 447-448. Rubin and Carbajal-Quintas have set forth several advantages to DRBs:

- (1) May result in lower bids because a contractor may not feel the need to insert high contingency cost into the bid to cover claims.
- (2) Dispute is resolved quickly so that construction continues and shutdowns and delays are avoided.
- (3) Encourage parties to identify problems early and deal with them promptly.
- (4) DRB is familiar with the project and has a better understanding of the project than judges and juries.
- (5) Parties are likely to accept a DRB recommendation because it is issued from an impartial, mutually acceptable panel.
- (6) Existence of DRB on the job increases likelihood that problems will be resolved among the parties themselves.
- (7) Cost of DRB (estimated between .04% to .51% of the total cost) is a fraction of what parties may spend on litigation or arbitration.
- (8) To date, there have been few court challenges of DRB actions.

Id.

⁷⁹ See *id.* at 447.

⁸⁰ See *id.* at 448.

⁸¹ See James P. Groton & Charles B. Molineaux, *Inventory of Dispute Resolution Techniques for Various Kinds of Disputes*, in *ALTERNATIVE DISPUTE RESOLUTION IN THE CONSTRUCTION INDUSTRY* 57, 62 (Robert F. Cushman et al. eds., 1991 & James P. Groton ed., Supp. 1993).

⁸² John R. Kohnke, *Dispute Review Boards*, in *ADR: A PRACTICAL GUIDE TO RESOLVE CONSTRUCTION DISPUTES* 267, 272 (Alan E. Harris et al. eds., 1994).

arb is a hybrid of mediation and arbitration. In a med-arb proceeding, "the same person who mediates the dispute also is authorized to arbitrate any issues remaining unresolved by the mediation."⁸³ This process has come under some fire by critics who charge that it may undermine the neutral's ability to mediate because parties may not be as forthcoming if they know the mediator may become the arbitrator.⁸⁴ In order to allay these fears, med-then-arb developed. Med-then-arb involves a commitment to use both processes, but the dispute is handed over to a different neutral if mediation is exhausted.⁸⁵

Two more ADR methods available to construction industry participants are early neutral evaluation (ENE) and the mini-trial. Like mediation, ENE is applicable to many types of civil cases, including complex disputes. In ENE, a neutral evaluator—a private attorney expert in the substance of the dispute—holds a several-hour confidential session with parties and counsel early in the litigation to hear both sides of the case.⁸⁶ Afterwards, the evaluator identifies strengths and weaknesses of the parties' positions, flags areas of agreement and disputes and issues a non-binding assessment of the merits of the case.⁸⁷ Mini-trials are private, nonbinding proceedings in which the parties may agree to present their "best case" in summary form, usually through their attorney, to a panel of top management representatives who are not involved in the dispute.⁸⁸ Thus, several ADR alternatives to arbitration are available to construction industry participants; these alternatives may prove more suitable to the construction industry than either traditional litigation or arbitration procedures.

B. Success of ADR Methods Other than Construction Arbitration

Generally, parties who have used ADR methods other than arbitration on large construction projects have had very positive experiences. In Los Angeles, the County Metropolitan Transportation Authority successfully used partnering and DRBs in the second phase of its continuing subway

⁸³ Douglas J. Yarn, *Med/Arb*, in *ADR: A PRACTICAL GUIDE TO RESOLVE CONSTRUCTION DISPUTES* 217, 217 (Alan E. Harris et al. eds., 1994).

⁸⁴ *See id.* at 218.

⁸⁵ *See id.* at 219.

⁸⁶ *See* Robert B. Fitzpatrick & Melissa S. Brigget, *Alternative Dispute Resolution—Types of ADR Mechanisms*, in 1 *CURRENT DEVELOPMENTS IN EMPLOYMENT LAW: ALI-ABA COURSE OF STUDY MATERIALS*, Aug 24-26, 1995, Santa Fe, NM 259, 273.

⁸⁷ *See id.*

⁸⁸ *See id.*

project.⁸⁹ Of the amount finished as of July 1994, claims were down more than 90% from a comparable stage in the first phase of the project.⁹⁰ Total claims on the project fell from 1,952 to 147.⁹¹ And as of mid-1994, the Arizona Department of Transportation had used partnering on 96 projects, none of which had any claims on them.⁹² In a Deloitte & Touche survey, a full 80% of corporate counsel who extensively use ADR procedures reported at least a 20% cost savings.⁹³ In a similar Deloitte & Touche survey, it was reported that fewer than 50% of general contractors' counsel had recommended ADR,⁹⁴ showing some opposition to procedures, such as partnering and DRBs, which leave out attorneys.

Thus, because "[r]ecent years have seen a growing disenchantment with [construction] arbitration,"⁹⁵ the construction industry is increasingly turning to ADR procedures other than arbitration to resolve its disputes. Arbitration simply appears to have become too complicated, time-consuming and expensive in light of other procedures. Mediation, DRBs, partnering and other ADR procedures appear to have many of the same advantages as arbitration without as many of the perceived negative aspects.

A comprehensive survey of attorneys, design professionals and contractors was conducted in 1994 to see what construction industry professionals thought about dispute resolution procedures. The survey results were then published in *Construction Lawyer*.⁹⁶ One important part of the survey asked the respondents to rate the perceived effectiveness of various ADR approaches.⁹⁷ "Respondents [to the survey] were asked to

⁸⁹ See McManamy, *supra* note 4, at 24.

⁹⁰ See *id.*

⁹¹ See *id.*

⁹² See *id.*

⁹³ See *id.* at 27 (citing a Deloitte & Touche 1993 survey of 246 general and outside counsels for Fortune 1,000 companies).

⁹⁴ See McManamy, *supra* note 4, at 27.

⁹⁵ Milton F. Lunch, *Stature of Mediation Gains as a Dispute Resolution Option*, BUILDING DESIGN & CONSTRUCTION, Dec. 1, 1991, at 31, 31.

⁹⁶ The survey was co-sponsored by the ABA Forum on the Construction Industry, the ABA Public Contracts Section, the national Construction Industry Dispute Avoidance and Resolution Task Force (DART), Associated General Contractors, DPIC Companies and organizations in Europe and Australia. See Thomas J. Stipanowich & Leslie King O'Neal, *Charting the Course: The 1994 Construction Industry Survey on Dispute Avoidance and Resolution—Part I*, CONSTRUCTION LAW., Nov. 1995, at 5, 5-12. For more extensive survey results, see *id.* The bold numbers in the charts indicate the most preferred method for that group of respondents.

⁹⁷ See *id.* at 10-12.

compare their perceptions of the relative effectiveness of various techniques in achieving certain goals⁹⁸ on a scale of one to five, one indicating the procedure is very ineffective and five indicating the procedure is very effective. The following three charts indicate the perceived effectiveness of various ADR procedures by those in the industry.⁹⁹ The first chart shows what attorneys thought of different ADR methods. Mediation, it is shown, was the favored method in most categories. Early neutral evaluation was thought by attorneys to be the most useful in preserving job relationships and in meeting the job budget.

Chart A—Attorneys¹⁰⁰

	Binding Arbitration	Dispute Review Board	Early Neutral Evaluation	Mediation	Mini- trial	Non- binding Arbitra- tion
Reducing Cost of Resolving Dispute	3.04	3.19	3.69	3.95	2.76	2.53
Reducing Time to Resolve Dispute	3.25	3.30	3.54	3.93	2.86	2.60
Enhancing Under- standing of Dispute	3.36	3.24	3.65	3.86	3.71	3.35
Minimizing Future Disputes	3.06	3.10	3.16	3.48	2.64	2.45
Opening Channels of Communi- cation	2.49	3.24	3.76	3.89	2.70	2.71
Preserving Job Relation- ships	2.08	3.13	3.66	3.53	2.30	2.29
Meet Job Budget	2.09	2.92	3.49	3.07	2.08	2.09

⁹⁸ *Id.*

⁹⁹ *See id.* at 10-11 tbls. B-D.

¹⁰⁰ *Id.* tbl. B.

The second chart shows what design professionals thought of the various ADR methods. As the chart shows, partnering was the favored method in almost every category. Early neutral evaluation was found to be the most effective method in enhancing understanding of the dispute.

Chart B—Design Professionals¹⁰¹

	Binding Arbitration	Dispute Review Board	Early Neutral Evaluation	Medi- ation	Mini- trial	Non-binding Arbitration	Partnering
Reducing Cost of Resolving Dispute	2.74	3.14	3.72	3.55	2.47	2.58	3.87
Reducing Time to Resolve Dispute	2.59	2.95	3.55	3.38	2.26	2.35	3.90
Enhancing Understand- ing of Dispute	2.84	3.44	3.62	3.36	3.11	2.89	3.01
Minimizing Future Disputes	2.60	2.77	3.21	2.90	2.29	2.32	3.94
Opening Channels of Communi- cation	2.07	2.89	3.53	3.23	2.03	2.20	4.44
Preserving Job Relation- ships	1.78	2.68	3.35	2.61	1.77	1.79	4.32
Meeting Job Budget	1.60	2.28	2.76	2.13	1.58	1.60	3.80
Meeting Job Schedule	1.55	2.40	2.99	2.19	1.57	1.62	3.99

¹⁰¹ *Id.* tbl. C.

The third chart shows what construction contractors thought of the various ADR methods. In the case of contractors, partnering was found to be the most effective ADR method in every category surveyed.

Chart C—Construction Contractors¹⁰²

	Binding Arbitration	Dispute Review Board	Early Neutral Evaluation	Medi- ation	Mini- trial	Nonbinding Arbitration	Partner- ing
Reducing Cost of Resolving Dispute	3.07	2.89	3.29	3.25	2.45	2.95	4.05
Reducing Time to Resolve Dispute	3.08	2.81	3.07	3.14	2.18	2.84	4.06
Enhancing Understand- ing of Dispute	3.36	3.05	3.16	3.40	3.02	3.40	3.41
Minimizing Future Disputes	2.71	2.51	2.96	2.68	2.13	2.52	3.92
Opening Channels of Communi- cation	2.34	2.37	2.87	2.72	1.79	2.37	4.45
Preserving Job Relationships	2.07	2.13	2.63	2.24	1.79	1.95	4.36
Meeting Job Budget	1.90	1.84	2.59	1.77	1.44	1.87	3.81

The survey results illustrate what many observers have said for some time: arbitration has become too time-consuming and costly and too much like actual litigation to accomplish its stated goals. Thus, industry professionals, even attorneys, have concluded that other processes exist that are more effective than binding arbitration. On-site resolution mechanisms and prevention methods were perceived by all industry participants as more effective than arbitration and other third-party binding procedures. It is also interesting to note that the survey revealed that design professionals and

¹⁰² *Id.* tbl. D.

contractors overwhelmingly preferred partnering—a process without much, or any, involvement from attorneys—to other ADR methods.¹⁰³

C. The American Arbitration Association Responds

At the same time ADR methods other than arbitration in the construction industry seem to be getting a more favorable reception, use of arbitration has declined. Peaking in 1990, construction arbitration filings with the AAA declined in each of the years 1990 through 1993.¹⁰⁴

Apparently sensing the growing dissatisfaction with the current perceived shortcomings of construction arbitration, in July 1995 the AAA's Construction ADR Task Force in July 1995, recommended important changes to the Association's rules and procedures after a thirteen-month review.¹⁰⁵ The rule changes went into effect on April 1, 1996. The aim of the new rules is to speed up the procedures and give more authority to arbitrators.¹⁰⁶ Highlights of the Task Force's recommendations included:

- A fast track arbitration system for cases involving claims of less than \$50,000. Features of the fast track include: a sixty-day completion time standard,¹⁰⁷ limited extensions,¹⁰⁸ establishment of special "fast track" arbitrators, limited information exchanges,¹⁰⁹ a single day of hearing in most cases and an award within seven days.¹¹⁰ In addition, it is presumed in cases involving less than \$10,000 that the case would be heard on documents only.¹¹¹

¹⁰³ See *id.*

¹⁰⁴ See McManamy, *supra* note 4, at 27 (citing the American Arbitration Association).

¹⁰⁵ The recommended changes were to be submitted to the National Construction Dispute Resolution Committee for approval, and new rules and procedural changes were to take effect in January 1996. See George H. Friedman, *Major Changes Coming to AAA Construction Arbitration*, CONSTRUCTION LAW., Nov. 1995, at 25, 28.

¹⁰⁶ See *id.* at 25.

¹⁰⁷ Previous rules do not provide such a timetable. Under the revised rules, an award must be made within sixty days of the appointment of the arbitrator. In addition, another rule provides that the hearing take place within thirty days of the appointment of the arbitrator. See AMERICAN ARBITRATION ASSOCIATION, CONSTRUCTION ADR TASK FORCE INTERIM REPORT 7-9 (July 31, 1995) [hereinafter AAA REPORT].

¹⁰⁸ Current rules allow an arbitrator to provide extensions on deadlines. The revised rules would permit an arbitrator just one seven-day extension. See *id.* at 6-7.

¹⁰⁹ Revised rules propose that two days prior to the hearing, all exhibits will be exchanged. See *id.* at 8.

¹¹⁰ Current rules provide for an award within fourteen days. See *id.* at 7-8.

¹¹¹ *Id.* at 8.

- A standard track involving claims between \$50,000 and \$1,000,000. Recommendations for the standard track include: more party input in preparation of proposed arbitrator lists, clarified rule on amendment of claims or counterclaims, express authority for the arbitrator to control the discovery process, arbitrator authority to deny postponement requests, broad arbitrator authority to control the hearing and arbitrator authority to correct technical errors in the award.¹¹²

- A large, complex case program which resolves disputes of claims involving over \$1,000,000. The AAA had already instituted changes in its large and complex cases, and the Task Force recommended that the program be instituted in construction disputes, with some changes to better suit the industry's needs.¹¹³ The important features of the large and complex case track include: mandatory use in disputes involving over \$1,000,000, an elite panel paid at customary rates; three arbitrators, at least one of which is an attorney with knowledge of the industry; mandatory preliminary conferences; broad arbitrator authority over discovery; and, in an attempt to speed the process, a presumption that hearings will proceed on a consecutive or block basis.¹¹⁴

- Increasing the organization's efforts to establish and promote other ADR methods, such as mediation, partnering and dispute review boards.¹¹⁵

The AAA has thus begun to respond to the concerns of industry leaders and critics of an increasingly burdensome and complex construction arbitration system. New construction arbitration rules will surely alleviate some of the concerns over the previous system, but even with the adoption of the task force's findings, disputes involving large construction projects still face costly and possibly protracted arbitration proceedings which may bring construction on a project to a halt. Mediation, DRBs and other ADR methods enjoy a higher opinion and success rate among industry professionals and should be tried before resorting to litigation or arbitration proceedings. Indeed, the Dispute Avoidance and Resolution Task Force (DART), an independent program of the AAA which promotes the awareness and use of ADR techniques in the construction industry, has endorsed a new Declaration of Principles for the Prevention and Resolution of Disputes.¹¹⁶ The purpose of DART, according to one official, is to

¹¹² See *id.* at 9-16.

¹¹³ See Friedman, *supra* note 105, at 27.

¹¹⁴ See AAA REPORT, *supra* note 107, at 16-20.

¹¹⁵ See Friedman, *supra* note 105, at 28.

¹¹⁶ See *Construction Industry Leaders Vow to Prevent Disputes, Resolve Disputes Outside of the Courtroom*, AAA News Release (AAA, New York, N.Y.), Apr. 15, 1996.

change the nature of the construction industry so that cooperation and teamwork again become part of the process.¹¹⁷ The AAA and other construction industry participants have thus begun to investigate the many other possibilities which are available to resolve and avoid construction disputes.

V. CONCLUSION

Arbitration is an established practice whose place in the construction industry is quite firm. But problems with the procedure do exist. If one party to an arbitration agreement has an interest in delaying the proceedings, arbitration is not, as proponents assert, a speedy, inexpensive method of resolving disputes.¹¹⁸ And if parties do indeed recognize that a dispute is bona fide and that an efficient resolution is advantageous, it now appears that mediation or DRBs provide many of the advantages of arbitration without some of the disadvantages.

Even though the American Arbitration Association has dealt with some of the problems and continues to address weaknesses in the arbitration process, it appears that the industry is moving more and more toward prevention of disputes and quick and efficient on-site resolutions. The construction industry, the legal profession and the AAA should continue to acknowledge the benefits of these other ADR methods and support the trend. The industry faces a critical period. The cost of litigation and arbitration is becoming prohibitive, and parties can only benefit from resolving construction disputes through other ADR methods.

The truth of the statement, "[I]f all you have is a hammer, every problem starts to look like a nail," is apparent in the context of construction disputes. Fortunately, the available tools include more than just a "hammer" (or arbitration), and construction disputes therefore should be approached with other "tools" (other ADR methods) in addition to arbitration.

¹¹⁷ See Thomas J. Stipanowich, *Beyond Arbitration: Innovation and Evolution in the United States Construction Industry*, 31 WAKE FOREST L. REV. 65, 81 n.87 (1996) (citing James Groton, *Chairman's Comments*, DART NEWSL., Oct. 1992, at 1).

¹¹⁸ See Kenneth M. Cushman et al., *Problems of Arbitration*, in CONSTRUCTION LITIGATION 753, 817 (Kenneth M. Cushman et al. eds., 1993).